1. A method comprising:

demultiplexing at least two wavelengths from a multiplexed optical signal;

detecting each of said demultiplexed wavelengths; and

generating a third wavelength to multiplex on said multiplexed optical signal.

2. The method of claim 1 including providing an angled reflector in the path of said multiplexed signal to reflect light of a first wavelength to a first detector and to pass light of a second wavelength.

3. The method of claim 1 including receiving said multiplexed optical signal over a waveguide and impressing said third wavelength on said waveguide.

4. The method of claim 1 wherein demultiplexing includes providing an integrated reflector with a detector of a first wavelength of said at least two wavelengths.

5. The method of claim 4 including providing an L-shaped detector.

6. The method of claim 5 including forming said detector on an electrooptical bench.

7. The method of claim 6 including providing a trench in said bench to receive a portion of said L-shaped detector.

8. The method of claim 6 including forming said reflector on the surface of said detector.

9. The method of claim 8 including forming said reflector by coating alternate layers of material on said detector.

10. The method of claim 8 including using said trench to position said detector on said bench.

11. The method of claim 7 including forming electrical connections from said bench to one portion of said L-shaped detector.

12. An optical system comprising:

a waveguide;

a demultiplexer coupled to said waveguide to demultiplex at least two wavelengths from a multiplexed optical signal on said waveguide, said demultiplexer including photodetectors to detect each of said wavelengths; and

a multiplexer coupled to said waveguide to multiplex an optical signal of a third wavelength onto said waveguide.

13. The system of claim 12 wherein said demultiplexer includes an angled reflector to reflect light of a first wavelength to a first detector and to pass light of a second wavelength.

14. The system of claim 12 wherein said multiplexer includes a laser coupled to a curved waveguide, said curved waveguide having a portion arranged proximately to said waveguide.

15. The system of claim 14 wherein said laser is coupled at one end of said curved waveguide and a power monitor is coupled to the other end of said curved waveguide.

16. The system of claim 12 wherein said demultiplexer includes an integrated reflector and photodetector, said photodetector to detect a wavelength passed by said reflector.

17. The system of claim 16 wherein said integrated reflector and detector includes an L-shaped detector.

18. The system of claim 17 wherein said demultiplexer, said multiplexer, and said waveguide are formed on a planar substrate including a trench to receive one arm of said L-shaped detector.

19. The system of claim 18 wherein said reflector is formed on the surface of said photodetector.

20. The system of claim 19 wherein said reflector includes a plurality of layers of material coated on said detector.

21. A photodetector comprising:

an L-shaped body; and

an optical reflector on one surface of said body to reflect one wavelength and to transmit another wavelength.

22. The photodetector of claim 21 wherein said reflector includes at least two layers on said surface.

23. The photodetector of claim 21 wherein said photodetector includes two portions arranged at approximately 90 degrees to one another, each of said portions being formed of multilayer packages.

24. The photodetector of claim 21 wherein said L-shaped body may be formed of a multilayer package and a lead frame.

25. The photodetector of claim 21 wherein said reflector includes a layer of filter material that filters out one wavelength and a layer of reflector that reflects another wavelength.